File 350:Derwent WPIX 1963-2003/UD,UM &UP=200352
File 347:JAPIO Oct 1976-2003/Apr(Updated 030804)
File 371:French Patents 1961-2002/BOPI 200209

Set	Items	Description
S1	1	AU='GREEP D W'
S2	7	AU='PITT W G'
S3	2	AU='PITT W'
S4	0	S1 AND S2:S3
S5	**10**	**S1:S3**

5/26,TI/1 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2003 Thomson Derwent. All rts. reserv.
013565619
WPI Acc No: 2001-049826/200106
Stabilized polymeric micelles for acoustically activated drug delivery

5/26,TI/2 (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2003 Thomson Derwent. All rts. reserv.
013319089
WPI Acc No: 2000-491028/200043
Compositions e.g. hyaluronic acid covalently bonded to activated polymeric substrates such as a polyolefin are used in cell-support materials for implantation contain acid group-containing biomolecules

5/26,TI/3 (Item 3 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2003 Thomson Derwent. All rts. reserv.
012481539
WPI Acc No: 1999-287647/199927
Electrosurgical electrode for performing operative procedures on patients

5/26,TI/5 (Item 5 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2003 Thomson Derwent. All rts. reserv.
011833607
WPI Acc No: 1998-250517/199822
Accelerated impact testing apparatus e.g. for simulating dynamic strain in golf club - has two holding fixtures for securing test specimen, and applies force over time to tip having load cell and measures impact velocity just prior to impact from velocity sensor signal

5/26,TI/6 (Item 6 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2003 Thomson Derwent. All rts. reserv.
011624234
WPI Acc No: 1998-041362/199804
Golf shaft testing apparatus - has hammer located to be driven toward shaft near second end to deliver impact loading to shaft

5/26,TI/7 (Item 7 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2003 Thomson Derwent. All rts. reserv.
010005479
WPI Acc No: 1994-273190/199434
Linear differential transformer providing position signals esp. in aircraft

hydraulic servo - uses pair of coaxial linear differential transformers with tubular armature moving in radial space between transformers

5/26,TI/8 (Item 8 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2003 Thomson Derwent. All rts. reserv.
009039125
WPI Acc No: 1992-166487/199220
Enhancing thermoplastic-fibre adhesion using plasma discharge - to treat fibres and coating them with thermoplastic in controlled atmos.

5/26,TI/9 (Item 9 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2003 Thomson Derwent. All rts. reserv.
008518161
WPI Acc No: 1991-022245/199103
Multiplex sequencing of DNA - with electro-blotting of DNA fragments on an aminated membrane and binding by crosslinking

5/26,TI/10 (Item 10 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2003 Thomson Derwent. All rts. reserv.
008084771
WPI Acc No: 1989-349883/198948
method of feeding belt-linked ammunition to Browning gun - has attachment to guide chute for standard ammunition boxes packed so both belt ends are at top

5/34/4 (Item 4 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2003 Thomson Derwent. All rts. reserv.
012457315
WPI Acc No: 1999-263423/199922
Method of delivery of a drug by administering drug in the hydrophobic core of a micellar drug carrier then applying ultrasonic energy to a selected site
Patent Assignee: UNIV BRIGHAM YOUNG (UYYO); UNIV UTAH RES FOUND (UTAH)
Inventor: **PITT W G** ; RAPOPORT N
Number of Countries: 023 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 9915151	A1	19990401	WO 98US20046	A	19980923	199922	B
EP 1037608	A1	20000927	EP 98950671	A	19980923	200048	
			WO 98US20046	A	19980923		

Priority Applications (No Type Date): US 9759774 P 19970923
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9915151	A1	E	44	A61K-009/10	

Designated States (National): CA JP KR US
Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

EP 1037608	A1	E		A61K-009/10	Based on patent WO 9915151

Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE
Abstract (Basic): WO 9915151 A1
NOVELTY - A method for delivering a drug to a specific site comprising administration of a drug in the hydrophobic core of a

micellar drug carrier, and applying ultrasonic energy to release the drug, enhances drug uptake with reduced side effects.

DETAILED DESCRIPTION - A method for delivering a drug to a specific site comprises:

(1) administration of a composition comprising a drug in a hydrophobic core of a micellar drug carrier; and

(2) applying ultrasonic energy to the selected site, releasing a drug from the hydrophobic core to the site.

INDEPENDENT CLAIMS are included for the compositions.

USE - The delivery method is useful for delivery of e.g. chemotherapeutic agents in the treatment of cancer. It enhances uptake of a drug by cells at a selected site.

ADVANTAGE - The method of delivery reduces side effects and multiple drug resistance. Ultrasonication enhances cell membrane permeability and intracellular drug uptake.

pp; 44 DwgNo 0/19

Technology Focus:

TECHNOLOGY FOCUS - POLYMERS - Preferred Carrier: The micellar drug carrier is an ABA-triblock copolymer, e.g. poly(ethylene oxide) poly(propylene oxide)-poly(ethylene oxide) block copolymer (preferably of molecular weight 6500).

PHARMACEUTICALS - Preferred Drug: The drug is preferably hydrophobic, e.g. an anthracycline, preferably doxorubicin or ruboxyl.

Extension Abstract:

EXAMPLE - HL-60 cells were treated with (A) free doxorubicin (DR), (B) free DR with ultrasound, (C) DR in micelles, or (D) DR in micelles with ultrasound. After treatment, cells were cultured for 4 days. Cells were counted and viability determined. IC50 values after 1 hour exposure for (A), (B), (C) and (D) were 2.35, 0.9, 1.25 and 0.19 microg/ml respectively.

Derwent Class: A25; A96; B03; B07

International Patent Class (Main): A61K-009/10

International Patent Class (Additional): A61K-047/32

File 348:EUROPEAN PATENTS 1978-2003/Aug W01
File 349:PCT FULLTEXT 1979-2002/UB=20030814,UT=20030807

Set	Items	Description
S1	2	AU='GREEP DARCY W'
S2	8	AU='PITT WILLIAM G'
S3	2	AU='PITT WILLIAM'
S4	0	S1 AND S2:S3
S5	**12**	**S1:S3**

5/6/1 (Item 1 from file: 348)
01237190
STABILIZATION AND ACOUSTIC ACTIVATION OF POLYMERIC MICELLES FOR DRUG DELIVERY

5/6/2 (Item 2 from file: 348)
01189667
ATTACHMENT OF ACID MOIETY-CONTAINING BIOMOLECULES TO ACTIVATED POLYMERIC SURFACES

5/6/3 (Item 3 from file: 348)
01043188
ELECTRIC FIELD CONCENTRATED ELECTROSURGICAL ELECTRODE

5/6/4 (Item 4 from file: 348)
01041720
ACOUSTICALLY ACTIVATED LOCALIZED DRUG DELIVERY

5/6/5 (Item 5 from file: 348)
00631589
Transformer arrangement

5/6/6 (Item 6 from file: 348)
00452150
DNA SEQUENCING USING LOW FLUORESCENCE BACKGROUND ELECTROBLOTTING MEMBRANE.

5/6/7 (Item 7 from file: 348)
00365166
Apparatus and method for supply of belt-linked ammunition.

5/6/8 (Item 1 from file: 349)
00757740
STABILIZATION AND ACOUSTIC ACTIVATION OF POLYMERIC MICELLES FOR DRUG DELIVERY

5/6/9 (Item 2 from file: 349)
00578366
ATTACHMENT OF ACID MOIETY-CONTAINING BIOMOLECULES TO ACTIVATED POLYMERIC SURFACES

5/6/10 (Item 3 from file: 349)
00486318 **Image available**
ELECTRIC FIELD CONCENTRATED ELECTROSURGICAL ELECTRODE

5/6/11 (Item 4 from file: 349)
00483799 **Image available**
ACOUSTICALLY ACTIVATED LOCALIZED DRUG DELIVERY

5/6/12 (Item 5 from file: 349)
00182403
DNA SEQUENCING USING LOW FLUORESCENCE BACKGROUND ELECTROBLOTTING MEMBRANE

File 155:MEDLINE(R) 1966-2003/Aug W3
File 34:SciSearch(R) Cited Ref Sci 1990-2003/Aug W2
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
File 73:EMBASE 1974-2003/Aug W2
File 5:Biosis Previews(R) 1969-2003/Aug W2

Set	Items	Description
S1	2	AU='GREEP DARCY W'
S2	83	AU='PITT W G' OR AU='PITT W.G.'
S3	61	AU='PITT WG'
S4	0	S1 AND S2:S3
S5	562	AMPHOPHILIC
S6	0	S1:S3 AND S5
S7	113323	COATING? ?
S8	**2**	**S1:S3 AND S7**

8/6/1 (Item 1 from file: 34)
02377534 Genuine Article#: KX500 Number of References: 33
Title: THE INFLUENCE OF PLASMA GAS SPECIES ON THE ADHESION OF THERMOPLASTIC TO ORGANIC FIBERS (Abstract Available)

8/6/2 (Item 2 from file: 34)
01302040 Genuine Article#: GM709 Number of References: 0
Title: ENHANCED INTERFACIAL ADHESION OF FIBERS TO THERMOPLASTIC - COMPARISON OF POLYARAMID AND GLASS (Abstract Available)

```
     (FILE 'HOME' ENTERED AT 08:12:42 ON 21 AUG 2003)
     FILE 'REGISTRY' ENTERED AT 08:12:56 ON 21 AUG 2003
                E FLUOROPOLYMER/CN
                E FLUOROPOLYMERS/CN
                E POLYETHYLENE OXIDE/CN
L1              1 S E3
                E POLYETHYLENE GLYCOL/CN
L2              1 S E3
                E ETHYLENE OXIDE COPOLYMER/CN
                E POLYPROPYLENE OXIDE/CN
                E FLUOROCARBON/CN
                E FLUOROCARBONS/CN
L3              1 S E3
                E HYDROCARBONS/CN
L4              1 S E3
     FILE 'HCAPLUS, MEDLINE, BIOSIS, EMBASE' ENTERED AT 08:15:57 ON 21 AUG 2003
L5         212526 S L1 OR L2 OR ETHYLENE OXIDE(2A)COPOLYMER? OR HYDROPHILIC
L6         237019 S L3 OR L4 OR POLYPROPYLENE OXIDE OR HYDROPHOBIC
L7          22101 S AMPHIPHILIC
L8         728577 S COATING?
L9          60186 S (L5 AND L6) OR L7
L10          2902 S L9 AND L8
L11          2902 S L9(10A)L8
L12       2809587 S ELECTROSURGICAL OR ELECTROSURGERY OR ELECTROSYNERESIS OR SURG
L13         20755 S MEDICAL (W) (DEVICE OR DEVICES OR INSTRUMENT? OR IMPLEMENT OR
L14            52 S L11 AND (L12 OR L13)
L15            48 DUPLICATE REMOVE L14 (4 DUPLICATES REMOVED)
L16          2902 S L9(10W)L8
L17          2902 S L9(8A)L8
L18          2902 S L8(N)L9
L19         58058 S (FLUOROPOLYMER? OR CERAMIC OR SILICONE OR GLASS) (10A)SUBSTRA
L20             3 S L14 AND L19

L20  ANSWER 1 OF 3  HCAPLUS  COPYRIGHT 2003 ACS on STN
AN   2003:221926  HCAPLUS
DN   138:251070
TI   Device with chemical surface patterns
IN   Textor, Marcus; Michel, Roger; Voeroes, Janos; Hubbell, Jeffrey A.; Lussi,
     Jost
PA   Eidgenoessische Technische Hochschule Zuerich, Switz.
SO   PCT Int. Appl., 69 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
IC   ICM  G01N033-543
     ICS  A61L029-08; A61L027-34; A61L031-10; A61L027-28
CC   9-1 (Biochemical Methods)
FAN.CNT 1
     PATENT NO.         KIND  DATE          APPLICATION NO.  DATE
     ---------------    ----  --------      ---------------  --------
PI   WO 2003023401       A1   20030320      WO 2001-CH548    20010912
         W:  AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES,
             FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG,
             KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
             MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL,
             TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY,
```

KG, KZ, MD, RU
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI WO 2001-CH548 20010912

AB The invention concerns a device with chem. surface patterns (defined surface areas of at least two different chem. compns.) with biochem. or biol. relevance on substrates with prefabricated patterns of at least two different types of regions (.alpha., .beta.,...), whereas at least two different, consecutively applied mol. self-assembly systems (A, B...) are used in a way that at least one of the applied assembly systems (A or B or...) is specific to one type of the prefabricated patterns (.alpha. or .beta. or...). A silicon wafer was coated with TiO2 followed by SiO2 and a pattern of 5 X 5 squares of TiO2 was etched through the SiO2 layer. The patterned surface was dipped in aq. ammonium dodecyl phosphate for self-assembly of DDP on top of the TiO2 areas, rendering these areas highly ***hydrophobic*** . The surface was dipped in an aq. soln. of poly(L-lysine)-g-poly(ethylene glycol) (PLL-g-PEG) to selectively adsorbed to the SiO2 regions. Texas Red-streptavidin selectively adsorbed to the PLL-g-PEG ***coating*** .

ST device surface pattern biochem substrate prepattern; self assembly dodecyl phosphate titanium oxide; polylysine PEG selective adsorption silicon oxide; protein selective adsorption patterned surface

IT Prion proteins
RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(PrPSc; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Animal tissue
Body fluid
Egg yolk
Lymph
Plant tissue
Waters
(anal. of; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Nucleic acids
RL: ANT (Analyte); ARG (Analytical reagent use); BSU (Biological study, unclassified); DEV (Device component use); TEM (Technical or engineered material use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(analogs; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Joint, anatomical
(ankle, artificial; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Joint, anatomical
(artificial, components; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Hip
(artificial; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Radioactive substances
(as labels; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Analytical apparatus
(biochem.; device with chem. surface patterns with biochems. on

substrates with prefabricated patterns)

IT Chemicals
(biochems.; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Integrins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(biomedical device with cell adhesion patterns interacting with; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Polymers, reactions
RL: DEV (Device component use); RCT (Reactant); TEM (Technical or engineered material use); RACT (Reactant or reagent); USES (Uses)
(block, diblock, self-assembly on prepatterned surfaces; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Polymers, reactions
RL: DEV (Device component use); RCT (Reactant); TEM (Technical or engineered material use); RACT (Reactant or reagent); USES (Uses)
(block, self-assembly on prepatterned surfaces; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Medical goods
(bone cements, endoprosthesis used in combination with; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Prosthetic materials and Prosthetics
(cardiovascular implants; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Medical goods
(catheters; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Polyelectrolytes
(cationic, copolymers, selective assembly on prepatterned surfaces; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Epithelium
(cells of, in biomedical device; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Polymers, reactions
RL: DEV (Device component use); RCT (Reactant); TEM (Technical or engineered material use); RACT (Reactant or reagent); USES (Uses)
(co-, polycationic, selective assembly on prepatterned surfaces; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Metals, uses
RL: ARG (Analytical reagent use); DEV (Device component use); TEM (Technical or engineered material use); ANST (Analytical study); USES (Uses)
(colloids, as labels; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Albumins, biological studies
RL: BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); PYP (Physical process); BIOL (Biological study); PROC (Process)
(conjugates with Oregon Green, selective adsorption on patterned silicon wafer; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Adsorption
Desorption
(detection of change in refractive index due to; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)
IT Refractive index
(detection of change in; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)
IT Bacteria (Eubacteria)
Pathogen
Salmonella
(detn. of; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)
IT Adhesion, biological
Agrochemicals
Animal
Animal tissue culture
Apparatus
Aptamers
Bioassay
Biosensors
Blood analysis
Cell
Cell differentiation
Cell morphology
Cell proliferation
Chelating agents
Combinatorial chemistry
Cytoskeleton
Diagnosis
Diffraction gratings
Drug screening
Environmental analysis
Evanescent wave
Fluorescence microscopy
Food analysis
Human
Immobilization, molecular
Luminescent substances
Medical equipment
Molecular association
Optical waveguides
Pharmaceutical analysis
Plant analysis
Soil analysis
Spin labels
Surface
Urine analysis
Veterinary medicine
(device with chem. surface patterns with biochems. on substrates with prefabricated patterns)
IT Agglutinins and Lectins
Antibodies
Antigens
DNA
Enzymes, analysis
Glycopeptides

Nucleic acids
Oligonucleotides
Oligosaccharides, analysis
Peptide nucleic acids
Polynucleotides
RNA
RL: ANT (Analyte); ARG (Analytical reagent use); BSU (Biological study, unclassified); DEV (Device component use); TEM (Technical or engineered material use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Ligands
RL: ANT (Analyte); ARG (Analytical reagent use); DEV (Device component use); TEM (Technical or engineered material use); ANST (Analytical study); USES (Uses)
(device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Proteins
RL: ANT (Analyte); BSU (Biological study, unclassified); MSC (Miscellaneous); ANST (Analytical study); BIOL (Biological study)
(device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Acrylic polymers, uses
Glass , uses
Polycarbonates, uses
Polyimides, uses
Silicates, uses
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(device with chem. surface patterns with biochems. on ***substrates*** with prefabricated patterns)

IT Blood vessel
(devices; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Luminescent substances
(dyes, as label; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Joint, anatomical
(elbow, artificial; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Prosthetic materials and Prosthetics
(endoprosthetic; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Blood vessel
(endothelium, cells of, in biomedical device; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Extracellular matrix
(expression of factors to; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Hand
(finger, artificial; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Bone, disease
(fracture, prosthetics for fixing; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Immunoglobulins

RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); DEV (Device component use); TEM (Technical or engineered material use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(fragments; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Polymers, reactions
RL: DEV (Device component use); RCT (Reactant); TEM (Technical or engineered material use); RACT (Reactant or reagent); USES (Uses)
(graft, with PEG, selective ***coating*** on prepatterned surfaces by electrostatic interactions at specific pH; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Polyoxyalkylenes, reactions
RL: DEV (Device component use); RCT (Reactant); TEM (Technical or engineered material use); RACT (Reactant or reagent); USES (Uses)
(grafted polymers, selective ***coating*** on prepatterned surfaces by electrostatic interactions at specific pH; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Cell membrane
(immobilized peptide or protein interacting with receptors in; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(immobilized peptide or protein interacting with, in cell membranes; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Peptides, biological studies
Proteins
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); DEV (Device component use); TEM (Technical or engineered material use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(immobilized; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Dental materials and appliances
Prosthetic materials and Prosthetics
(implants; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Fibroblast
Macrophage
Osteoblast
Osteoclast
(in biomedical device; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT pH
(in selective ***coating*** of PEG-grafted polymers on prepatterned surfaces by electrostatic interactions; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Joint, anatomical
(knee, artificial; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT ESR (electron spin resonance)
NMR spectroscopy
(labels for; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Mass
(labels; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Materials
(layered; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)
IT Dyes
(luminescent, as label; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)
IT Prosthetic materials and Prosthetics
(maxillofacial; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)
IT Plastics, uses
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(moldable; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)
IT Antibodies
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); DEV (Device component use); TEM (Technical or engineered material use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(monoclonal; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)
IT Fasteners
(nails; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)
IT Nerve
(neuron, in biomedical device; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)
IT Biochemical molecules
(nonspecific adsorption of; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)
IT Self-assembly
(of alkane phosphates or alkane phosphonates on prepatterned surfaces; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)
IT Hydrophilicity
Hydrophobicity
(of areas of prepatterned surfaces; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)
IT Isoelectric point
(of oxide, nitride, or carbide areas; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)
IT Stem cell
(osteogeneic, in biomedical device; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)
IT Plates
Screws
(osteosynthesis; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)
IT Self-assembled monolayers
(patterns of; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)
IT Carbides
Nitrides
Oxides (inorganic), reactions
Transition metal oxides
RL: DEV (Device component use); RCT (Reactant); TEM (Technical or engineered material use); RACT (Reactant or reagent); USES (Uses)
(phosphate- or phosphonate-interacting prefabricated patterns of;

device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Medical goods
(pins; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Cell
(polynuclear, patterns of adsorbed macrophages on biomed. device not nucleating into; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Bone formation
(precursor cells, in biomedical device; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Adsorption
(protein, nonspecific; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Affinity
(screening; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Electrostatic deposition
(selective, of PEG-grafted polymers on prepatterned surfaces; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Phosphates, reactions
RL: DEV (Device component use); RCT (Reactant); TEM (Technical or engineered material use); RACT (Reactant or reagent); USES (Uses)
(self-assembly on prepatterned surfaces; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Surface plasmon
(sensor; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Joint, anatomical
(shoulder, artificial; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Muscle
(smooth, cells of, in biomedical device; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Medical goods
(stents; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Organelle
(stress fiber, formation of; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Toxicity
(studies of; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Ceramics
Composites
(substrate of; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Alloys, uses
Polymers, uses
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(substrate of; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Spinal column
(***surgery*** device; device with chem. surface patterns with

biochems. on substrates with prefabricated patterns)

IT Plastics, uses
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(thermoplastics; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Silylation
(to make ***hydrophobic*** areas; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Heart
(valve, artificial; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT Joint, anatomical
(wrist, artificial; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT 9005-49-6, Heparin, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(biomedical device with cell adhesion patterns interacting with; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT 7365-45-9, HEPES
RL: NUU (Other use, unclassified); USES (Uses)
(buffer; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT 58-85-5D, Biotin, conjugates
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); DEV (Device component use); TEM (Technical or engineered material use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT 199869-49-3D, ethoxylated polylysine derivs.
RL: ARU (Analytical role, unclassified); DEV (Device component use); RCT (Reactant); TEM (Technical or engineered material use); ANST (Analytical study); RACT (Reactant or reagent); USES (Uses)
(device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT 9013-20-1, Streptavidin
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT 1314-13-2, Zinc oxide, reactions 12055-23-1, Hafnium oxide (HfO2)
RL: DEV (Device component use); RCT (Reactant); TEM (Technical or engineered material use); RACT (Reactant or reagent); USES (Uses)
(device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT 9003-53-6, Polystyrene 9011-14-7, Polymethylmethacrylate
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT 151754-91-5
RL: ARU (Analytical role, unclassified); DEV (Device component use); TEM (Technical or engineered material use); ANST (Analytical study); USES (Uses)
(for blocking protein binding to silicon dioxide regions of silicon wafer; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT 7440-22-4, Silver, uses 7440-57-5, Gold, uses 14808-60-7, Quartz, uses
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(in bioanal. sensing platform; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT 99896-85-2D, immobilized 123063-31-0D, immobilized 134580-64-6D, immobilized 193613-75-1D, immobilized 359878-44-7D, immobilized 393153-52-1D, immobilized 502453-68-1D, immobilized 502453-69-2D, immobilized 502453-70-5D, immobilized 502453-71-6D, immobilized 502453-72-7D, immobilized 502453-73-8D, immobilized 502453-74-9D, immobilized 502453-75-0D, immobilized 502453-76-1D, immobilized 502453-77-2D, immobilized 502453-78-3D, immobilized 502453-79-4D, immobilized 502453-80-7D, immobilized 502453-81-8D, immobilized 502453-82-9D, immobilized 502453-83-0D, immobilized 502453-84-1D, immobilized 502453-85-2D, immobilized 502453-86-3D, immobilized 502453-87-4D, immobilized 502453-88-5D, immobilized 502453-89-6D, immobilized 502453-90-9D, immobilized 502453-91-0D, immobilized 502453-92-1D, immobilized 502453-93-2D, immobilized 502453-94-3D, immobilized 502453-95-4D, immobilized 502453-96-5D, immobilized 502453-97-6D, immobilized 502453-98-7D, immobilized 502453-99-8D, immobilized 502454-00-4D, immobilized 502454-01-5D, immobilized 502454-02-6D, immobilized 502454-03-7D, immobilized 502454-04-8D, immobilized 502454-05-9D, immobilized 502454-06-0D, immobilized 502454-07-1D, immobilized 502454-08-2D, immobilized 502454-09-3D, immobilized 502454-10-6D, immobilized 502454-11-7D, immobilized 502454-12-8D, immobilized 502454-13-9D, immobilized 502454-14-0D, immobilized 502454-15-1D, immobilized 502454-16-2D, immobilized 502454-17-3D, immobilized 502454-18-4D, immobilized 502454-19-5D, immobilized 502454-20-8D, immobilized 502454-21-9D, immobilized 502454-22-0D, immobilized 502454-23-1D, immobilized 502454-24-2D, immobilized 502454-25-3D, immobilized 502454-26-4D, immobilized 502454-27-5D, immobilized 502454-28-6D, immobilized 502454-29-7D, immobilized 502454-30-0D, immobilized 502454-31-1D, immobilized 502454-32-2D, immobilized 502454-33-3D, immobilized 502454-34-4D, immobilized 502454-35-5D, immobilized 502454-36-6D, immobilized 502454-37-7D, immobilized 502454-38-8D, immobilized 502454-39-9D, immobilized 502454-40-2D, immobilized 502454-41-3D, immobilized 502454-42-4D, immobilized 502454-43-5D, immobilized 502454-44-6D, immobilized 502454-45-7D, immobilized 502454-46-8D, immobilized 502454-47-9D, immobilized 502454-48-0D, immobilized 502454-49-1D, immobilized 502454-50-4D, immobilized 502454-51-5D, immobilized 502454-52-6D, immobilized 502454-53-7D, immobilized 502454-54-8D, immobilized 502454-55-9D, immobilized 502454-56-0D, immobilized 502454-57-1D, immobilized 502454-58-2D, immobilized 502454-59-3D, immobilized 502454-60-6D, immobilized 502454-61-7D, immobilized 502454-62-8D, immobilized 502454-63-9D, immobilized 502454-64-0D, immobilized 502454-65-1D, immobilized 502454-66-2D, immobilized 502454-67-3D, immobilized 502454-68-4D, immobilized 502454-69-5D, immobilized 502454-70-8D, immobilized 502454-71-9D, immobilized 502454-72-0D, immobilized 502454-73-1D, immobilized 502454-74-2D, immobilized 502454-75-3D, immobilized 502454-76-4D, immobilized 502454-77-5D, immobilized 502454-78-6D, immobilized 502454-79-7D, immobilized 502454-80-0D, immobilized 502454-81-1D, immobilized
RL: BSU (Biological study, unclassified); DEV (Device component use); PRP (Properties); TEM (Technical or engineered material use); BIOL (Biological study); USES (Uses)
(in patterns in biomed. device; device with chem. surface patterns with

biochems. on substrates with prefabricated patterns)

IT 1313-96-8, Niobium oxide 1314-23-4, Zirconium oxide, reactions
1314-61-0, Tantalum oxide 13463-67-7, Titanium oxide, reactions
RL: DEV (Device component use); RCT (Reactant); TEM (Technical or engineered material use); RACT (Reactant or reagent); USES (Uses)
(phosphate- or phosphonate-interacting prefabricated patterns of; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT 7631-86-9, Silicon oxide, uses
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(prefabricated patterns of; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT 195136-58-4D, conjugates with albumin
RL: BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); PYP (Physical process); BIOL (Biological study); PROC (Process)
(selective adsorption on patterned silicon wafer; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT 9013-20-1D, Streptavidin, conjugates with Texas Red 82354-19-6D, Texas Red, conjugates with streptavidin
RL: BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); PYP (Physical process); RCT (Reactant); BIOL (Biological study); PROC (Process); RACT (Reactant or reagent)
(selective adsorption on patterned silicon wafer; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT ***25322-68-3D*** , Polyethylene glycol, grafted polymers
RL: DEV (Device component use); RCT (Reactant); TEM (Technical or engineered material use); RACT (Reactant or reagent); USES (Uses)
(selective ***coating*** on prepatterned surfaces by electrostatic interactions at specific pH; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT 106392-12-5D, di- or multi-block
RL: DEV (Device component use); RCT (Reactant); TEM (Technical or engineered material use); RACT (Reactant or reagent); USES (Uses)
(self-assembly on prepatterned surfaces, protein resistance to ***hydrophobic*** surfaces in relation to; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT 15477-76-6D, Phosphonate, alkane
RL: DEV (Device component use); RCT (Reactant); TEM (Technical or engineered material use); RACT (Reactant or reagent); USES (Uses)
(self-assembly on prepatterned surfaces; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT 65138-75-2, Ammonium dodecyl phosphate
RL: DEV (Device component use); RCT (Reactant); TEM (Technical or engineered material use); RACT (Reactant or reagent); USES (Uses)
(self-assembly on titanium oxide regions of silicon wafer; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

IT 7440-21-3, Silicon, reactions
RL: DEV (Device component use); RCT (Reactant); TEM (Technical or engineered material use); RACT (Reactant or reagent); USES (Uses)
(wafer as substrate; device with chem. surface patterns with biochems. on substrates with prefabricated patterns)

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE
(1) Amirpour, M; ANALYTICAL CHEMISTRY 2001, V73, P1560 HCAPLUS
(2) Chu, C; US 5721131 A 1998 HCAPLUS
(3) Eidgenossisch Tech Hochschule; WO 0065352 A 2000 HCAPLUS
(4) Goetting, L; LANGMUIR 1999, V15, P1182 HCAPLUS
(5) Kornguth, S; US 5629213 A 1997 HCAPLUS
(6) Lahiri, J; LANGMUIR 1999, V15, P2055 HCAPLUS
(7) Napier, M; US 6127127 A 2000 HCAPLUS
(8) Ning-Ping, H; LANGMUIR 2001, V17(2), P489
(9) Tarlov, M; US 5514501 A 1996 HCAPLUS
(10) Whitesides, G; US 5776748 A 1998 HCAPLUS

L20 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 2002:811823 HCAPLUS
DN 137:314651
TI Manufacture of functional nano-particle ceramic carrier layer on metal, glass and ceramic surfaces
IN Nonninger, Ralph; Binkle, Olaf
PA ITN-Nanovation G.m.b.H., Germany
SO Ger. Offen., 6 pp.
CODEN: GWXXBX
DT Patent
LA German
IC ICM C04B041-87
ICS C03C017-22
CC 57-2 (Ceramics)
Section cross-reference(s): 56, 63
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 10119538	A1	20021024	DE 2001-10119538	20010421
	DE 10119538	C2	20030626		
	WO 2002086194	A2	20021031	WO 2002-DE1453	20020419
	WO 2002086194	A3	20030530		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI DE 2001-10119538 A 20010421
AB The procedure is disclosed for the prodn. of porous ceramic layers serving as carrier layer on metallic, ***ceramic*** , enamelled or ***glass*** ***substrates*** using cryst. nano-particles with particle sizes between 3-100 nm over a wet-chem. process, as well as functionalizing this porous ceramic layer by bringing a second component into the pores. Nanopowders of alumina, zirconia, YSZ, TiO_2, boehmite, and iron oxide are used to form the porous ceramic layers. The porous, ceramic layers can be filled with a water repellent (e.g., fluorosilane), ***hydrophilic*** agent, degreasing agent, and corrosion inhibitor, be remained those in the substrate and/or delivered subsequently if necessary or be loaded with bactericides, aromas, perfumes, or inhalation materials, which are transferred targeted proportioned to the room air. For example,

a suspension of nanopowder of yttria-stabilized zirconia or titania with trioxadecanoic acid in polyvinyl alc. is deposited on a steel or Al substrate as a transparent layer, dried, and sintered for 1 h at 500.degree. to form the porous ceramic layer on steel. The resulting articles having the porous carrier ceramic layers are suitable in ***medical*** ***instruments*** and devices.

ST ceramic nanoparticle ***coating*** carrier layer metal glass; ***medical*** ***device*** alumina zirconia titania bactericide ***coating***

IT Acrylic polymers, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(Laromer, Lucirin, component of nanoparticle ceramic suspension; manuf. of functional cryst. nano-particle ceramic carrier layer)

IT Particle size
(ceramic nanopowder; manuf. of functional cryst. nano-particle ceramic carrier layer)

IT Nanoparticles
(ceramic; manuf. of functional cryst. nano-particle ceramic carrier layer)

IT Silanes
RL: TEM (Technical or engineered material use); USES (Uses)
(halosilanes, ***hydrophobic*** agent; manuf. of functional cryst. nano-particle ceramic carrier layer)

IT Antibacterial agents
Corrosion inhibitors
Degreasing agents
Odor and Odorous substances
Perfumes
(impregnated substance; manuf. of functional cryst. nano-particle ceramic carrier layer)

IT Ceramic ***coatings***
Glass ***substrates***
(manuf. of functional cryst. nano-particle ***ceramic*** carrier layer)

IT Ceramics
(porous, carrier layers; manuf. of functional cryst. nano-particle ceramic carrier layer)

IT Ceramics
Enamels (vitreous)
(***substrate*** ; manuf. of functional cryst. nano-particle ***ceramic*** carrier layer)

IT 64417-98-7, Yttrium zirconium oxide
RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(component of ceramic carrier layer; manuf. of functional cryst. nano-particle ceramic carrier layer)

IT 9003-39-8
RL: MOA (Modifier or additive use); USES (Uses)
(component of nanoparticle ceramic suspension; manuf. of functional cryst. nano-particle ceramic carrier layer)

IT 57-55-6, Propylene glycol, uses 107-21-1, Ethylene glycol, uses 111-90-0, Diethylene glycol monoethyl ether 112-34-5, Diethylene glycol monobutyl ether 9002-89-5, Polyvinyl alcohol 9003-01-4D, Polyacrylic acid, derivs. 16024-56-9 16024-58-1 25087-26-7D, Polymethacrylic acid, derivs.
RL: TEM (Technical or engineered material use); USES (Uses)

(component of nanoparticle ceramic suspension; manuf. of functional cryst. nano-particle ceramic carrier layer)

IT 1318-23-6, Boehmite 1332-37-2, Iron oxide, processes 13463-67-7, Titanium oxide, processes
RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(nanopowder; manuf. of functional cryst. nano-particle ceramic carrier layer)

IT 7429-90-5, Aluminum, uses 12597-69-2, Steel, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(***substrate*** ; manuf. of functional cryst. nano-particle ***ceramic*** carrier layer)

IT 1314-23-4, Zirconium oxide (ZrO2), processes
RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(yttria-stabilized, component of ceramic carrier layer; manuf. of functional cryst. nano-particle ceramic carrier layer)

IT 1314-36-9, Yttrium oxide (Y2O3), processes
RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(zirconia stabilized with, component of ceramic carrier layer; manuf. of functional cryst. nano-particle ceramic carrier layer)

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Anon; DE 19960091 A1 HCAPLUS

L20 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 1999:339444 HCAPLUS

DN 130:343042

TI Biocompatible polymeric ***coatings* for cell culture substrate and ***medical*** ***devices***

IN Domb, Abraham Jacob

PA Alomone Labs Ltd., Israel

SO Eur. Pat. Appl., 10 pp.
CODEN: EPXXDW

DT Patent

LA English

IC ICM A61L029-00
ICS A61L031-00

CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 9, 38

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 914835	A2	19990512	EP 1998-309089	19981105
	EP 914835	A3	20010321		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	US 6127448	A	20001003	US 1998-189101	19981109
PRAI	IL 1997-122153	A	19971110		

AB The invention provides a biocompatible polymeric ***coating*** material selected from the group consisting of linear, dendrimeric and branched polymers which contain primary, secondary, tertiary or quaternary amine groups with ***hydrophobic*** side chains and which polymers are

insol., or only slightly sol., in aq. soln. at pH 3-11 and sol. in at least one org. solvent selected from the group consisting of alcs., acetone, Me Et ketone, THF, dioxane, chloroform, dichloromethane, hexanes, mixts. thereof and mixts. of any of the above with water. The invention also provides the use of such a polymeric material in a biocompatible ***coating*** compn. for substrates such as a cell growth culture substrate or a ***medical*** ***device*** . The cell adhesion properties of polystyrene plates coated with various polyamine derivs. (e.g. stearyl and pentyl derivs. of polyethylenimine and polyvinylamine) were tested using PC12 neuronal cells.

ST biocompatible polymer ***coating*** medical prosthetic; cell growth substrate biocompatible polymer ***coating***

IT Animal cell line
(P12 neuronal cells; biocompatible polymeric ***coatings*** for cell growth culture substrate and ***medical*** ***devices***)

IT Animal cell line
(P19; biocompatible polymeric ***coatings*** for cell growth culture substrate and ***medical*** ***devices***)

IT Polysaccharides, biological studies
RL: DEV (Device component use); POF (Polymer in formulation); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(aminodeoxy; biocompatible polymeric ***coatings*** for cell growth culture substrate and ***medical*** ***devices***)

IT Blood vessel
(artificial; biocompatible polymeric ***coatings*** for cell growth culture substrate and ***medical*** ***devices***)

IT Medical goods
(biocompatible polymeric ***coatings*** for cell growth culture substrate and ***medical*** ***devices***)

IT Dendritic polymers
RL: DEV (Device component use); POF (Polymer in formulation); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(biocompatible polymeric ***coatings*** for cell growth culture substrate and ***medical*** ***devices***)

IT Polyoxyalkylenes, uses
RL: MOA (Modifier or additive use); USES (Uses)
(biocompatible polymeric ***coatings*** for cell growth culture substrate and ***medical*** ***devices***)

IT Polymers, biological studies
RL: DEV (Device component use); POF (Polymer in formulation); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(branched; biocompatible polymeric ***coatings*** for cell growth culture substrate and ***medical*** ***devices***)

IT Medical goods
(catheters; biocompatible polymeric ***coatings*** for cell growth culture substrate and ***medical*** ***devices***)

IT Polyelectrolytes
(cationic; biocompatible polymeric ***coatings*** for cell growth culture substrate and ***medical*** ***devices***)

IT Fluorescent dyes
(compn. contg.; biocompatible polymeric ***coatings*** for cell growth culture substrate and ***medical*** ***devices***)

IT Containers
(glass, for storage of polymer ***coating*** compns.; biocompatible polymeric ***coatings*** for cell growth culture substrate and ***medical*** ***devices***)

IT Polymers, biological studies

RL: DEV (Device component use); POF (Polymer in formulation); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(linear; biocompatible polymeric ***coatings*** for cell growth culture substrate and ***medical*** ***devices***)

IT Prosthetic materials and Prosthetics
(orthopedic; biocompatible polymeric ***coatings*** for cell growth culture substrate and ***medical*** ***devices***)

IT Polyamines
Polyamines
RL: DEV (Device component use); POF (Polymer in formulation); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(polyamide-; biocompatible polymeric ***coatings*** for cell growth culture substrate and ***medical*** ***devices***)

IT Polyamides, biological studies
Polyamides, biological studies
RL: DEV (Device component use); POF (Polymer in formulation); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(polyamine-; biocompatible polymeric ***coatings*** for cell growth culture substrate and ***medical*** ***devices***)

IT Antibodies
Hormones, animal, biological studies
Receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(polymer ***coatings*** suitable for attachment of; biocompatible polymeric ***coatings*** for cell growth culture substrate and ***medical*** ***devices***)

IT Alcohols, properties
RL: PRP (Properties)
(polymers soly. in; biocompatible polymeric ***coatings*** for cell growth culture substrate and ***medical*** ***devices***)

IT ***Glass*** beads
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(porous; biocompatible polymeric ***coatings*** for cell growth culture ***substrate*** and ***medical*** ***devices***)

IT Medical goods
(sponges; biocompatible polymeric ***coatings*** for cell growth culture substrate and ***medical*** ***devices***)

IT Medical goods
(stents; biocompatible polymeric ***coatings*** for cell growth culture substrate and ***medical*** ***devices***)

IT Animal tissue culture
(substrates for growth of; biocompatible polymeric ***coatings*** for cell growth culture substrate and ***medical*** ***devices***)

IT Cell adhesion
(substrates for; biocompatible polymeric ***coatings*** for cell growth culture substrate and ***medical*** ***devices***)

IT Plates
(tissue culture; biocompatible polymeric ***coatings*** for cell growth culture substrate and ***medical*** ***devices***)

IT 9061-61-4, Nerve growth factor
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(biocompatible polymeric ***coatings*** for cell growth culture substrate and ***medical*** ***devices***)

IT 74-88-4D, Methyl iodide, reaction products with polyethylenimine

79-10-7D, Acrylic acid, polymers, alkylated 112-67-4D, Palmitoyl chloride, reaction products with polyethylenimine 112-76-5D, Stearyl chloride, reaction products with polyethylenimine 543-59-9D, n-Pentyl chloride, reaction products with polyethylenimine 593-67-9D, Vinylamine, polymers, alkylated 1002-69-3D, Decyl chloride, reaction products with polyethylenimine 3386-33-2D, n-Octadecyl chloride, reaction products with polyethylenimine 9002-98-6D, Polyethylenimine, alkylated 24937-49-3D, Polyornithine, alkylated 25104-12-5D, Polyornithine, alkylated 25104-18-1D, Poly(L-lysine), alkylated 26336-38-9D, Poly(vinylamine), alkylated 26913-06-4D, Polyethylenimine, SRU, alkylated 38000-06-5D, Poly(L-lysine), alkylated 49791-22-2D, Decanoyl bromide, reaction products with polyvinylamine 224312-22-5 224312-24-7
RL: DEV (Device component use); POF (Polymer in formulation); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(biocompatible polymeric ***coatings*** for cell growth culture substrate and ***medical*** ***devices***)

IT 56-81-5, Glycerin, uses ***25322-68-3*** , Polyethylene glycol
RL: MOA (Modifier or additive use); USES (Uses)
(biocompatible polymeric ***coatings*** for cell growth culture substrate and ***medical*** ***devices***)

IT 67-64-1, Acetone, properties 67-66-3, Chloroform, properties 75-09-2, Dichloromethane, properties 78-93-3, Methyl ethyl ketone, properties 109-99-9, Tetrahydrofuran, properties 110-54-3, Hexane, properties 123-91-1, Dioxane, properties
RL: PRP (Properties)
(polymers soly. in; biocompatible polymeric ***coatings*** for cell growth culture substrate and ***medical*** ***devices***)